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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/876,782	06/07/2001	Christina Banta	10010133-1	8851

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EXAMINER	
COBANOGLU, DILEK B	
ART UNIT	**PAPER NUMBER**
3626	

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/876,782	BANTA ET AL.	
	Examiner	Art Unit	
	Dilek B. Cobanoglu	3626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *06/07/2001,06/06/2003*
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Notice to Applicant

1. This communication is in response to the amendment filed on 06/15/2006. Claims 27-28 are newly added. Claims 1, 3-9, 12-26 are amended. Claims 1-28 remain pending.

Claim Objections

2. The claim objections about the use of the trademark of DICOM are hereby withdrawn in view of the amendments and remarks made by Applicant in the amendment filed 06/15/2006.

Claim Rejections - 35 USC § 112

3. The 35 USC 112 rejection of claims 12-24 is hereby withdrawn in view of the amendments and remarks made by Applicant in the amendment filed 06/15/2006.

Claim Rejections - 35 USC § 101

4. The 35 USC 101 rejection of claims 9, 12, 22 is hereby withdrawn in view of the amendments and remarks made by Applicant in the amendment filed 06/15/2006.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 6-15, 17-24 and 26-28 are rejected under 35 U.S.C. 102(b) as being unpatentable by Seliger at al. (hereinafter Seliger) (U.S. Patent No. 5,546,580).

A. Claim 1 is now amended to recite a computer-implemented study merging method, comprising:

i. merging a patient's first medical study with a logically related second medical study to create a composite study (Seliger et al.; col.3, lines 6-23) and,

ii. reconciling study identifiers of the first and second medical studies in favor of the first medical study, whose unique study identifier, having a distinct database entity, is thereby assigned to the composite study (Seliger et al.; col.11, lines 56-67 and col. 12, lines 20-30),

iii. wherein said merging includes an automatic adding of medical information of the second medical study to the first medical study in the creating of said composite study. (Seliger et al.; col.5, lines 39-42 and col. 12, lines 7-31).

B. As per claim 2, Seliger et al. discloses the study merging method of claim 1, wherein the medical information is at least one of medical images, patient measurements, findings, comments, waveforms, Doppler audio, and a medical study report (Seliger et al.; col.3, lines 6-8).

C. Claim 3 is now amended to recite the study merging method of claim 2, further comprising computing patient measurement information of the first medical study based on the patient measurements in the second medical study, upon said merging (Seliger et al.; col. 11, lines 56-67, col. 12, lines 7-12 and col.12, lines 56-65).

D. Claim 4 is now amended to recite the study merging method of claim 1, wherein adding comprises adding stage information of the second medical study to the first medical study according to a protocol attribute of the second medical study (Seliger et al.; col.12, lines 1-6).

Examiner understands stage information as information obtained or measured in time intervals or at different stages according to the applicant's specifications, paragraph (0032); therefore examiner considers "changes since the last update" as a stage information.

E. Claim 6 is now amended to recite the study merging method of claim 1, wherein said adding comprises adding a series instance identifier, for a series of the second medical study, to the first medical study without generating a new series instance identifier in the first medical study for said series of the second medical study (Seliger; col. 12, lines 1-31).

F. Claim 7 is now amended to recite the study merging method of claim 1, wherein said adding comprises adding new medical information of the second medical study to the composite study based on the new medical information

including a study identifier of the second medical study (Seliger et al.; col.12, lines 17-19 and col.11, lines 59-61).

G. Claim 8 is now amended to recite the study merging method of claim 1, further comprising identifying the first and second medical studies, wherein (Seliger et al.; col.3, lines 8-18) said merging is initiated from a terminal remote from a storage unit containing either of the first and second medical studies (Seliger et al.; col.12, line 65 to col13, line 2).

H. Claim 9 is now amended to recite a computer-implemented study merging method, comprising:

i. merging a patient's first medical study with a logically related second medical study to create a merged study, (Seliger et al.; col.3, lines 6-8, and col. 12, lines 7-31), such that medically context-specific information stored in at least one of the first and second medical studies is merged based upon a protocol of at least one of the first and second studies, the protocol being indicated by an attribute of at least one of the first and second studies; (Seliger et al.; col.12, lines 1-6)

ii. saving respective identifiers of the first and second studies (col. 12, lines 1-31):

iii. deleting a distinct database identity for at least one of the first and second studies (col. 12, lines 1-31): and

iv. assigning a unique study identifier to the merged study (col. 12, lines 1-31).

I. As per claim 10, Seliger et al. discloses the study merging method of claim 9, wherein the medically context-specific information is stage information (Seliger et al.; col.5, lines 16-17).

J. As per claim 11, Seliger et al. discloses the study merging method of claim 9, wherein the medically context-specific information is measurement information (Seliger et al.; col.2, lines 3-7).

K. Claim 26 is now amended to recite the medical study merging method of claim 25, wherein the composite study is assigned a unique study identifier of the first medical study. (Seliger et al.; col. 3, lines 20-23, col. 11, lines 56-67 and col. 12, lines 1-6).

L. Newly added claim 27 recites the study merging method of claim 1, wherein the study identifiers of the first and second medical studies are unique among studies in a database having the distinct database entity (Seliger; col. 11, lines 56-67).

M. Newly added claim 28 recites the computer readable medium of claim 12, wherein the study identifiers of the first and second medical studies are unique among studies in a database having the distinct database entity (Seliger; col. 11, lines 56-67).

7. As per amended claims 12-15, and 18-24, they are article of manufacture claims which repeat the same limitations of claims 1-4 and 7-11, the corresponding method claims, as a collection of executable instructions stored on machine readable media as opposed to a series of process steps. Since the teachings of Seliger disclose the

underlying process steps that constitute the method of claims 1-4 and 7-11, it is respectfully submitted that they likewise disclose the executable instructions that perform the steps as well. As such, the limitations of claims 12-15, and 18-24, are rejected for the same reasons given above for claims 1-4 and 7-11.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 5,16 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art.

A. Claims 5 and 16 are now amended to recite the study merging method of claim 1, wherein the first and second medical studies include unique identifiers according to a lexicon of Digital Imaging and Communication in Medicine (DICOM).

Seliger et al. fails to expressly teach the unique identifiers according to a DICOM standard, per se, since it appears that Seliger et al. is more directed to updating records such as patient's flowsheets using sequence numbers and event information. However, this feature is well known according to the applicant's background information.

As per paragraph (0002) of applicant's background information, DICOM is a prevailing standard for medical imaging management. Examiner

considers that it would be obvious at the time the invention was made to a person having ordinary skill in the art to include DICOM standards into the medical information system of Seliger.

B. Claim 25 is now amended to recite a computer-implemented medical study merging method (Seliger et al.; col.3, lines 6-8), comprising:

i. Identifying, in accordance with a lexicon of Digital Imaging and Communication in Medicine (DICOM), a patient's related first and second medical studies to be merged (Seliger et al.; col.12, lines 9-12);

ii. merging the first medical study with the second medical study (Seliger et al.; col.3, lines 8-18 and lines 20-23) such that a resultant composite study has a study identifier different from at least one of the first and second medical studies (Seliger et al.; col.11, lines 59-65), wherein, in accordance with said lexicon, the merging includes an automatic adding of a series of the second medical study to the composite study (Seliger et al.; col. 5, lines 39-42), the series of the second medical study having a series identifier the same as a pre-merge corresponding series identifier, with the series of the second medical study including at least an artifact with an artifact identifier the same as a pre-merge corresponding artifact identifier, such that the composite study includes series and corresponding series identifiers from both the pre-merged first and second medical studies (Seliger et al.; col. 11, lines 59-65).

The obviousness of modifying the teaching of Seliger to include the Identifying, in accordance with a lexicon of Digital Imaging and Communication in Medicine (DICOM), a patient's related first and second medical studies to be merged (as taught by Applicant's admitted prior art) is as addressed above in the rejection of claim 5-16 above and incorporated herein.

Response to Arguments

10. Applicant's arguments with respect to claims 1, 5, 6, 9, 12, 22 and 25 have been considered but are moot in view of the new ground(s) of rejection.

A. In response to Applicant's argument on page 9 about Selinger fails to disclose the amended claim 1, Examiner respectfully submits that the amended claim 1 is rejected as explained on page 3 of this office action.

B. In response to Applicant's argument on page 10 about Selinger fails to disclose the amended claim 12, Examiner submits that as explained on pages 6-7 of this office action, claim 12 is an article of manufacture claim, which repeats the same limitations of claim 1. And the rejection of claim 1 is explained on page 3 of this office action.

C. In response to Applicant's argument on page 10 about Selinger fails to disclose the amended claim 25, Examiner respectfully submits that claim 25 is now rejected under 35 U.S.C. 103 (a) by combining Selinger and the Applicant's admitted prior art on page 7-9 of this office action.

D. In response to Applicant's argument on page 10 about claim 5 depends from claim 1 and admitted prior art cannot compensate for the shortcomings of Seliger, Examiner respectfully submits that the amended claim 1 is rejected as explained on page 3 of this office action, and as explained by the Applicant, the DICOM is a prevailing standard for medical imaging management, which is well known in the art. Therefore the combination of Seliger and Applicant's prior art should overcome the rejection of claim 5.

E. In response to the argument about the rejection of claim 6, and Cook reference cannot compensate for the deficiencies of Seliger, Examiner respectfully submits that the amended claim 6 has been rejected as expained on page 4 of this office action.

F. In response to the argument about the prior art of record, alone or in combination, fails to disclose the aspect of claim 9, Examiner respectfully submits that the amended claim 9 is now rejected with the reference Seliger as explained on page 5 of this office action.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not applied arts teach "Medical image diagnostic system" 5,605,153, "Method for validating a digital imaging communication standard message" 5,671,353, "Workstation for medical service" 5,675,744, "Patient information analysis management system and method" 5,713,350, "Workstation for medical service"

5,915,242, "Medical image management system and method" 2002/0016718, "DICOM to XML generator" 2002/0143824 and "Method and system for medical patient data analysis" 6,611,846.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dilek B. Cobanoglu whose telephone number is 571-272-8295. The examiner can normally be reached on 8-4:30.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 571-272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DBC

Dilek B. Cobanoglu
Art Unit 3626
08/23/2006

C. LUKE GILLIGAN
PATENT EXAMINER